# Report of RVIB Nathaniel B. Palmer Cruise 01-03 to the

## Western Antarctic Peninsula



# 24 April to 5 June 2001

United States Southern Ocean Global Ocean Ecosystems Dynamics Program Report Number 2

Report prepared by Peter Wiebe, Eileen Hofmann, Bob Beardsley, Christine Ribic, Erik Chapman, Carin Ashjian, Scott Gallager, Cabell Davis, Wendy Kozlowski, Ari Friedlaender, Catherine Berchok, Howard Rutherford, Joe Warren, Karen Fisher with assistance from colleagues in the scientific party,

Kozlowski, Alt Fredikelender, Lamerine oercium, rowant neumenoum, oer warren, oer war

Available from
U.S. Southern Ocean GLOBEC Planning Office
Center for Coastal Physical Oceanography
Criteroto Hall
Old Dominion University
Norfolk, VA 23529





Acknowledgments
The success we enjoyed on this expedition is due in large part to the very excellent technical assistance we received from all nine members of the Raytheon Marine Technical support group, Led by Alze Doyle (Marine Project Coordinator), they responded in a very positive and experienced way to the technical polarism that arose and they provided a steady professional hand on the day-to-day operation. It believes, the ship's officers and crew provided excellent ship handling, enabling on safely work though high winds and sees, through sea see and around cheeping, and in shallow, and the safely day to the steady of the safely handless of the safely work of the safely handless of the safely and the safely day of the safely handless of the safely day of the safely handless of the safely and the safely day of the safely handless of the safely safely

NBE01-03 Crude Participants on the Bow of the BVJB N.JR. Pollure

Back Row (L-R): Rebecca Couroy, Muureen Taylor, Munthew Borke, Erik Chapman, Cabell Davis, Sue Beardsley, Jim Dolan, Wendy Kozlowski, Mile
Thingan, New Warren, Baris Salhoghi, Karen Fisher, Howard Rutherford, David Green
Middle Row (L-R): Art Friedlaned, Catherine Berchol, Carin Ashlipa, Mark Demee, Elicen Hofmann, Bob Beardsley, Jeff Onten, Am Szelag, Jesse
Doren, Christine Ribe; Scott Gallager, Andy Girant, Peter Webe

From Rost (L-R): Sasan Howard, Agram Seeralessan, Rosanti Sanay, Alice Doyle, Tom Bolmer, Mark Christmas

Photograph by Mark Christmas, National Geographs ◆◆◆◆◆

Photograph by Mark Christmas, National Geographs ◆◆◆◆◆



# PRINCIPLE OF CONTENTS REPROSE OF THE CRISE CRISE ARBERTINE LAP THOSE FRO ECT BEFORTS 1.4P THOSE FRO ECT BEFORTS 1.2 Data Collection and Methods 1.2.1 Data Distribution 1.2.1 Data Describer 1.2.2 Canada Vigor Sample 1.2.4 AGCY Montements 1.2.4 AGCY Montements 1.2.4 Preliminery Active 1.2.4 AGCY Montements 1.2.4 Preliminery Active 1.2.4 Describer 1.2.4 AGCY Montements 1.2.4 Preliminery Active 1.2.4 Describer 1.2.4 AGCY Montements 3) Meteorological Stocomerons. 3) & Incarconstruction. 3) & Total Angolisien and Processing. 3) & Total Angolisien and Ango 7.4 References. 18.1 MOCNESS report. 18.1 Introduction. 18.1.2 Methods and Agerosch. 18.1.3 Entities. 18.2.3 Entities. 18.2.4 Entites. 18.2.4 Entities. 18.2.4 Entities. 18.2.4 Entities. 18.2.4

8.2.I.2 Methods	
8.2.1.3 Results	π
8.2.2 Video Hankton Recorder studies	
8.2.2.1 Overview	
8.2.2.2 Methods	
8.2.2.3 The VPR system	
8.2.2.4 Sampling Methods	
8.2.2.5 Results and Discussion	
8.3 ROV observations of juvenile krill distribution, abundance, and behavior	
8.3.1 Objective and Methods	
8.3.2 Roults	
8.4 Sinrad EK500 Studies of volume backscatter	
.0♥ Scabird Distribution in the Marguerite Bay Area	
9.1 Introduction	
9.2 Methods	
9.3 Daytine Surveys	
9.3.1 Methods	92
9.3.2♦ Data Collected	
9.3.3 Preliminary Results	92
9.4 Scabird Nighttime Surveys	
9.4.1 Methods	
9.4.2 Data Collected	
9.4.3 Poliminary Results	93
9.5 Dier Sampling	94
9.5.1 Methods	94
9.5.2 Data Collected	94
9.5.3 Preliminary Results	94
0.0 Cetacean Visual Survey and Biopsy.	
10.1 Introduction	
10.2 Methods	
10.3 Results	
10.3.1 Sightings	96
10.3.2 Biopsy	96
0.4 Preliminary Findings/Discussion.	
1.0 Passive listening	
II.1 Introduction.	99
II.2 Methods	
II.3 Data Collected	
2.0 Bathymetry of region and mooring surveys.	
3.0 Science Writers Reports	
13.1 National Geographic Society.	
13.2 UCSCNSF	
RUSE PARTICIPANTS	
ippmak 1.♦ Ewe Log	
Lopends 2:   Summary of the CTD cass.	
Appendix 2: ♥ Summary of the CTD case.  Appendix 3: ♥ Summary of the water samples taken on each CTD cast.	
Appendix 3: ♥ Summary of the water samples taken on each CTD dat.  Appendix 4: ♥ Summary of expendiable conductivity-temperature-depth (CTD) probe dross.	
Appendix 5. ♥ Summary of expensions conductivity-temperature-depth (C.1.D) proof drops.	
Appendix 5: ♥ Summary of the expensione namythermograph (ABT) drops.	
Lppendix 6: ♥ AWS Installation and Repair Operations	
Appendix 8: Sonabusy deployments.	

IF YOU WISH TO VIEW THE COMPLETE DOCUMENT ON-LINE (15 Mbytes), <u>Click Here</u> and be prepared to wait.

OR you could download the <u>Wird 9.0</u> document (189 pages).